B1

1. (Once Amended) An immunoregulatory composition comprising isolated mannose receptor-bearing cells and a conjugate comprising an antigen and a carbohydrate polymer comprising mannose selected from the group consisting of fully oxidized mannose comprising free aldehydes and partially reduced mannose having aldehydes.

11. (Once Amended) The composition of Claim 8, wherein said biological response modifiers are selected from the group consisting of granulocyte macrophage colony stimulating factor (GM-CSF), interleukin-3, interleukin-4, vitamin D, [GM-CSF,] macrophage colony stimulating factor (M-CSF), Flt-3 ligand and tumor necrosis factor (TNF) alpha.

12. (Once Amended) The composition of Claim 1, wherein said antigen is selected from the group consisting of: nm23, p53, Her2/neu, human mucin 1 (MUC1), BRACA1, BRACA2, melanoma specific antigen (MAGE antigen), carcino embryonic antigen (CEA), ErB2, pollen, hepatitis C virus ([HIV] HPV) core protein, HPV E1 protein, HPV E2 protein, [and] HPV NS2 [proteins] protein, Plasmodium faliciparum circumsporozoite protein, HIV-gpl20/160 envelope glycoprotein, streptococcus surface protein Ag, influenza nucleoprotein, hemagglutinin-neuraminidase surface infection, TcpA pilin subunit ,Hepatitis A virus VP1 protein, LMCV nucleoprotein, Leishmania major surface glycoprotein (gp63), Bordetella pertussis surface protein, rabies virus G protein, Streptococcus M protein, respiratory syncytial virus (RSV) F protein, [or] RSV G [proteins] protein, Epstein Barr virus (EBV) gp340, [or] EBV nucleoantigen 3A, hemagglutinin, Borrelia burgdorferi outer surface protein (Osp) A, Mycobacterium tuberculosis 38kDa lipoprotein, [or] Mycobacterium tuberculosis Ag85, Neisseria meningitidis class 1 outer protein, Varicella zoster virus IE62, [and] Varicella zoster virus gpI, Rubella virus capsid protein, Hepatitis B virus pre S1 ag, Herpes simplex vims type I glycoprotein G, [or] Herpes simplex vims type I gp D, [or] Herpes simplex vims type I CP27, Murray valley encephalids virus E glycoprotein, [Hepadds A virus VP1,] polio virus capsid protein VP1, polio virus capsid protein VP2, [and] polio virus capsid protein VP3, chlamydia trachomatis surface protein, Hepatitis B virus envelope Ag pre S2, Human rhinovirus (HRV) capsid, papillomavirus peptides from oncogene E6, [and] papillomavirus peptides from oncogene E7, Listeria surface protein, Varicella virus envelope protein, Vaccinia virus envelope

protein, Brucella surface protein, a combination of one or more of said antigens, an antigenic fragment [amino acid subunit] of said antigens [comprising] that is five or more amino acids in length [or] and combinations of one or more of said [subunits] fragments.

A2 concld

13. (Once Amended) The composition of Claim 1, wherein said antigen is a mucin polypeptide, one or more repeated subunits thereof, or [a] an antigenic fragment of said repeated subunits, said fragment comprising at least 5 amino acids of said repeated subunits.

A3

21. (Once Amended) The composition of Claim 20, wherein said antigen delivery medium comprises a conjugate comprising an antigen and a carbohydrate polymer comprising mannose selected from the group consisting of fully oxidized mannose comprising free aldehydes and partially reduced mannose having aldehydes.

A4

25. (Once Amended) The composition of Claim 24, wherein said biological response modifier selected from the group consisting of granulocyte macrophage colony stimulating factor (GM-CSF), interleukin-3, interleukin-4, vitamin D, [GM-CSF,] macrophage colony stimulating factor (M-CSF), Flt-3 ligand and tumor necrosis factor (TNF) alpha.

B2

A5

27. (Once Amended) An immunoregulatory mannose receptor-bearing cell population, wherein said immunoregulatory mannose receptor-bearing cell population can be derived by a method comprising:

a) culturing mannose receptor-bearing cells *in vitro* with one or more biological response modifiers to produce an enhanced mannose receptor-bearing cell population; and

b) incubating said enhanced mannose receptor-bearing cell population with a conjugate comprising an antigen and a carbohydrate polymer comprising mannose selected from the group consisting of fully oxidized mannose comprising free aldehydes and partially reduced mannose having aldehydes, to obtain said immunoregulatory mannose receptor-bearing cell population.

A6

34. (Once Amended) The population of Claim 27, wherein said biological response modifier is selected from the group consisting of granulocyte macrophage colony stimulating factor (GM-CSF), interleukin-3, interleukin-4, vitamin D, [GM-CSF,]